

ABSTRACT OF THE DISCLOSURE

There is provided a nonvolatile memory including memory cells each of which includes a storage element including a bistable molecular layer, wherein the

5     bistable molecular layer contains a bistable molecule which brings about isomerization from a first isomer into a second isomer by injecting a hole and an electron into the bistable molecular layer, and brings about isomerization from the second isomer into the

10    first isomer by irradiating the bistable molecular layer with erase light, and the memory is configured to irradiate the bistable molecular layers of all the memory cells with the erase light while applying an electric field to the bistable molecular layer of only

15    a part of the memory cells that stores information to be held when erasing information stored in the rest of the memory cells.